§ 76.602

§76.605(a)(4) as follows. The visual signal level on each channel shall be measured and recorded, along with the date and time of the measurement, once every six hours (at intervals of not less than five hours or no more than seven hours after the previous measurement), to include the warmest and the coldest times, during a 24-hour period in January or February and in July or August.

- (4) The operator of each cable television system shall conduct triennial proof-of-performance tests of its system to determine the extent to which the system complies with the technical standards set forth in §76.605(a)(11).
- (c) Successful completion of the performance tests required by paragraph (b) of this section does not relieve the system of the obligation to comply with all pertinent technical standards at all subscriber terminals. Additional tests, repeat tests, or tests involving specified subscriber terminals may be required by the Commission or the local franchiser to secure compliance with the technical standards.
- (d) The provisions of paragraphs (b) and (c) of this section shall not apply to any cable television system having fewer than 1,000 subscribers: Provided, however, that any cable television system using any frequency spectrum other than that allocated to over-theair television and FM broadcasting (as described in §§ 73.603 and 73.210 of this chapter) is required to conduct all tests, measurements and monitoring of signal leakage that are required by this subpart. A cable television system operator complying with the monitoring, logging and the leakage repair requirements of §76.614, shall be considered to have met the requirements of this paragraph. However, the leakage log shall be retained for five years rather than the two years prescribed in \$76.1706.

Note 1 to §76.601: Prior to requiring any additional testing pursuant to §76.601(c), the local franchising authority shall notify the cable operator who will be allowed thirty days to come into compliance with any perceived signal quality problems which need to be corrected. The Commission may request cable operators to test their systems at any time.

NOTE 2 TO §76.601: Section 76.1717 contains recordkeeping requirements for each system

operator in order to show compliance with the technical rules of this subpart.

NOTE 3 TO §76.601: Section 76.1704 contains recordkeeping requirements for proof of performance tests.

[65 FR 53615, Sept. 5, 2000]

§ 76.602 Incorporation by reference.

(a) The materials listed in this section are incorporated by reference in this part. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the FED-ERAL REGISTER. The materials are available for inspection at the Federal Communications Commission, 445 12th. St. SW., Reference Information Center, Room CY-A257, Washington, DC 20554 and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/ federal register/

code_of_federal_regulations/ibr_locations.html.

- (b) The following materials are available from Advanced Television Systems Committee (ATSC), 1776 K Street NW., 8th Floor, Washington, DC 20006; phone: 202–872–9160; or online at http://www.atsc.org/standards.html.
- (1) ATSC A/65B: "ATSC Standard: Program and System Information Protocol for Terrestrial Broadcast and Cable (Revision B)," March 18, 2003, IBR approved for §76.640.
- (2) ATSC A/85:2011 "ATSC Recommended Practice: Techniques for Establishing and Maintaining Audio Loudness for Digital Television," (July 25, 2011) ("ATSC A/85 RP"), IBR approved for §76.607.
- (c) The following materials are available from Consumer Electronics Association (CEA), 1919 S. Eads St., Arlington, VA 22202; phone: 866–858–1555; or online at http://www.ce.org/standards.
- (1) CEA-542-B, "CEA Standard: Cable Television Channel Identification Plan," July 2003, IBR approved for \$76.605.
- (2) CEA-931-A, "Remote Control Command Pass-through Standard for

Home Networking," 2003, IBR approved for §76.640.

- (d) The following materials are available from Society of Cable Telecommunications Engineers (SCTE), 140 Philips Road Exton, PA 19341–1318; phone: 800–542–5040; or online at http://www.scte.org/standards/Standards Available.aspx.
- (1) ANSI/SCTE 26 2001 (formerly DVS 194): "Home Digital Network Interface Specification with Copy Protection," 2001, IBR approved for §76.640.
- (2) SCTE 28 2003 (formerly DVS 295): "Host-POD Interface Standard," 2003, IBR approved for §76.640.
- (3) SCTE 40 2003 (formerly DVS 313), "Digital Cable Network Interface Standard," 2003, IBR approved for \$76,640.
- (4) SCTE 41 2003 (formerly DVS 301): "POD Copy Protection System," 2003, IBR approved for §76.640.
- (5) ANSI/SCTE 54 2003 (formerly DVS 241), "Digital Video Service Multiplex and Transport System Standard for Cable Television," 2003, IBR approved for §76.640.
- (6) ANSI/SCTE 65 2002 (formerly DVS 234), "Service Information Delivered Out-of-Band for Digital Cable Television," 2002, IBR approved for §76.640.
- (e) Some standards listed above are also available for purchase from the following sources:
- (1) American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036; phone: 212–642–4980; or online at http://webstore.ansi.org/.
- (2) Global Engineering Documents (standards reseller), 15 Inverness Way East, Englewood, CO 80112; phone: 800–854–7179; or online at http://global.ihs.com.

 $[77 \; \mathrm{FR} \; 40300, \; \mathrm{July} \; 9, \; 2012]$

§ 76.605 Technical standards.

(a) The following requirements apply to the performance of a cable television system as measured at any subscriber terminal with a matched impedance at the termination point or at the output of the modulating or processing equipment (generally the headend) of the cable television system or otherwise as noted. The requirements are applicable to each NTSC or

similar video downstream cable television channel in the system:

- (1)(i) The cable television channels delivered to the subscriber's terminal shall be capable of being received and displayed by TV broadcast receivers used for off-the-air reception of TV broadcast signals, as authorized under part 73 of this chapter; and
- (ii) Cable television systems shall transmit signals to subscriber premises equipment on frequencies in accordance with the channel allocation plan set forth in CEA-542-B: "Standard: Cable Television Channel Identification Plan," (Incorporated by reference, see § 76.602).
- (2) The aural center frequency of the aural carrier must be 4.5 MHz ±5 kHz above the frequency of the visual carrier at the output of the modulating or processing equipment of a cable television system, and at the subscriber terminal.
- (3) The visual signal level, across a terminating impedance which correctly matches the internal impedance of the cable system as viewed from the subscriber terminal, shall not be less than 1 millivolt across an internal impedance of 75 ohms (0 dBmV). Additionally, as measured at the end of a 30 meter (100 foot) cable drop that is connected to the subscriber tap, it shall not be less than 1.41 millivolts across an internal impedance of 75 ohms (+3 dBmV). (At other impedance values, the minimum visual signal level, as viewed from the subscriber terminal. shall be the square root of 0.0133 (Z) millivolts and, as measured at the end of a 30 meter (100 foot) cable drop that is connected to the subscriber tap, shall be 2 times the square root of 0.00662(Z) millivolts, where Z is the appropriate impedance value.)
- (4) The visual signal level on each channel, as measured at the end of a 30 meter cable drop that is connected to the subscriber tap, shall not vary more than 8 decibels within any six-month interval, which must include four tests performed in six-hour increments during a 24-hour period in July or August and during a 24-hour period in January or February, and shall be maintained within: